

CLAIMS

WHAT IS CLAIMED IS:

1. A portable computer configurable in a tablet configuration, a laptop configuration, and a closed configuration, said portable computer comprising:

5 a display unit having a display device and a back surface;  
a base unit having a primary input device and a bottom surface; and  
a hinging assembly coupling said display unit to said base unit, said  
hinging assembly having a first hinge with a first axis of rotation and a second  
hinge with a second axis of rotation, wherein  
10 said back surface of said display unit is in contact with said bottom surface  
of said base unit when said portable computer is in said tablet mode,  
said primary input device and said display device are between said back  
surface of said display unit and said bottom surface of said base unit when said  
portable computer is in said closed configuration,  
15 one of said first hinge and said second hinge is rotated to reconfigure said  
portable computer between said closed configuration and said laptop  
configuration, and  
said first hinge and said second hinge are rotated to reconfigure said  
portable computer between said closed configuration and said tablet  
20 configuration.

2. The portable computer according to claim 1, wherein said first axis of rotation and said second axis of rotation are parallel.

3. The portable computer according to claim 2, wherein said first axis of rotation is laterally offset from said second axis of rotation.
4. The portable computer according to claim 2, wherein the rotation of said first hinge and said second hinge permits said display unit to rotate approximately 360 degrees relative to said base unit.
5. The portable computer according to claim 2, wherein a first friction force resists rotation of said first hinge about said first axis of rotation, and further wherein a second friction force resists rotation of said second hinge about said second axis of rotation, and further wherein said first friction force is of lesser magnitude than said second friction force.
6. The portable computer according to claim 5, wherein a separation force applied to separate said display unit from said base unit causes said first hinge to rotate until an angle of rotation of said first hinge equals a maximum angle of rotation associated with said first hinge and further application of said separation force causes said second hinge to rotate.
7. The portable computer according to claim 5, wherein said first friction force resists rotation of said first hinge in a first direction and a third friction force resists rotation of said first hinge in a second direction opposite to said first direction, said third friction force having a greater magnitude than both said first friction force and said second friction force.

8. The portable computer according to claim 7, wherein said second hinge has a first amount of friction when rotated in a first direction and a second amount of friction when rotated in a second direction opposite to said first direction.
9. The portable computer according to claim 2, said hinging assembly further including an armature, wherein said first hinge is coupled to said armature at a first pivot point and said second hinge is coupled to said armature at a second pivot point.
10. The portable computer according to claim 9, wherein said first hinge is coupled to said display unit so as to permit rotation of said display unit relative to said armature and said second hinge is coupled to said base unit so as to permit rotation of said base unit relative to said armature.
11. The portable computer according to claim 9, wherein said first hinge is coupled to said base unit so as to permit rotation of said base unit relative to said armature and said second hinge is coupled to said display unit so as to permit rotation of said display unit relative to said armature.
12. The portable computer according to claim 1, further including a latching assembly to maintain said portable computer in one of said closed configuration and said tablet configuration.
13. The portable computer according to claim 12, said latching assembly further including a latching arm having a first projection and a latch body having a first

cavity adapted to receive said first projection to maintain said portable computer in one of said closed configuration and said tablet configuration.

14. The portable computer according to claim 13, said latching arm further including a second projection, wherein said first cavity is also adapted to receive said second projection, and further wherein said first projection is received by said first cavity to maintain said portable computer in said closed configuration, and further wherein said second projection is received by said first cavity to maintain said portable computer in said tablet configuration.

15. The portable computer according to claim 13, said latching arm further including a second projection and said latch body further including a second cavity adapted to receive said second projection, wherein said first projection is received by said first cavity to maintain said portable computer in said closed configuration, and further wherein said second projection is received by said second cavity to maintain said portable computer in said tablet configuration.

16. The portable computer according to claim 1, wherein the angle of rotation of said display unit relative to said base unit achievable by rotating only said first hinge is at a maximum when said portable computer is in said laptop configuration.

17. The portable computer according to claim 1, wherein one of said first hinge and said second hinge has a limited range of rotation such that an upper limit of said range of rotation is reached when said portable computer is in the laptop configuration.

18. The portable computer according to claim 1, wherein said base unit partially rests on one of said first hinge and said second hinge when said portable computer is in said laptop configuration.

19. A method for reconfiguring a portable computer among a tablet configuration, a laptop configuration, and a closed configuration, wherein said display device is contained in a display unit and said primary input device is contained in a base unit, said method comprising:

when said portable computer is in said closed configuration such that said display device and said primary input device are contained between a back surface of said display unit and a bottom surface of said base unit, rotating a first hinge about a first axis of rotation to tilt said display unit relative to said base unit until said portable computer is in said laptop configuration; and

when said portable computer is in said laptop configuration, rotating a second hinge about a second axis of rotation parallel to said first axis of rotation until said portable computer is in said tablet configuration.

20. The method according to claim 19, further including closing a latching assembly when said portable computer is in said tablet configuration to couple said base unit to said display unit.

21. The method according to claim 20, further including opening said latching assembly when said portable computer is in said closed configuration.

22. The method according to claim 19, wherein said first hinge has a range of rotation having an upper limit, and further wherein rotating said first hinge to said upper limit places said portable computer in said laptop configuration.

23. The method according to claim 19, wherein rotating said first hinge includes  
5 applying a separating force to said display unit and said base unit.

24. The method according to claim 19, wherein a first friction force resists rotation of said first hinge and a second friction force resists rotation of said second hinge.

25. The method according to claim 24, wherein said first friction force is smaller than said second friction force when said portable computer is being changed from said  
10 closed configuration to said laptop configuration.

26. The method according to claim 24, wherein said first friction force is greater than said second friction force when said portable computer is being changed from said  
tablet configuration to said laptop configuration.